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ABSTRACT

This guide is intended to assist planners in developing and using labor market and occupational information when assessing the need for and planning occupational training programs. The first chapter discusses the responsibilities of various federal, state, and local entities for developing labor market information. Special attention is given to the role of the Iowa State Occupational Information Coordinating Committee. The three major components of labor market information--economic or labor force, occupational, and demographic information--are examined. The remainder of the guide deals with the following steps in using labor market information in the four-step process of program assessment/evaluation, resource assessment, authorization, and implementation or termination: list creation (gathering ideas for programs and translating program ideas into occupations); list refinement (reducing lists to the most appropriate occupations and grouping occupations into programs); labor market assessment (reviewing published labor market information, gathering additional information, and reviewing findings with an employer advisory committee), and program design (designing a curriculum and determining needed instructor expertise). (MN)

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A GUIDE FOR LOCAL OCCUPATIONAL PROGRAM PLANNING

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INTRODUCTION

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INTRODUCTION

Why The Guide Was Developed

In these times of high unemployment and shrinking public revenue, there is a growing concern about the use of public resources for employment and training and vocational education programs. Legislators, public and private sector employers, and the public-at-large are demanding that occupational training programs be closely aligned to the needs of the employer community. That is, occupational training should lead to a job.

Federal and state legislation has mandated that occupational training programs reflect labor market demand for the skills to be taught. Attempts to meet this mandate have made planners acutely aware that accurately forecasting the supply of and the demand for labor is a difficult task. Planners have found that information available from federal and state agencies may not completely meet their local needs. Their experience has shown that gathering pertinent information obtained through research and surveys can be difficult and expensive and the resulting information may be unreliable. Some planners have attempted to solve these problems by contracting with private consultants or other institutions for the necessary analysis. However, today's reduced budgets may severely limit the ability to contract for services. As the emphasis on meeting labor demand grows and as employment and training and vocational education budgets shrink, it will become even more important for planners to take full advantage of existing labor market information and learn to develop any additional information needed for local use.

Recognizing the need to provide a resource/tool for vocational and employment and training planners to help bridge the gap between training an individual

in the skills in demand and the realities of the labor market, the Iowa State Occupational Information Coordinating Committee (ISOICC) has produced this guide for planners on how to develop and use labor market and occupational information. This Guide is the result of an identified need to provide assistance to planners in how to use the resources available to better assess the need for occupational training programs.

The Guide itself is based upon materials published by the California Occupational Information Coordinating Committee and much of the general process materials contained in this Guide are taken from the California material. The California materials were oriented to local planning and provided an excellent basis for modification to the Iowa situation.

This Guide will provide the occupational program planner with simple suggestions on how to incorporate labor market and occupational information into the planning process at minimum cost. While the Guide will not attempt to deal with all of the complexities of economic analysis, it will provide the planner with the essential tools and methods of labor market analysis for planning occupational programs.

Who Is Responsible For Labor Market Information?

Responsibility for the development of labor market information (LMI) is shared among federal, state, and local entities. At the federal level, primary responsibility rests with the U.S. Department of Labor (DOL). DOL produces a variety of statistical and analytical information on employment trends nationwide and for selected geographical areas. This information is used in setting national priorities and in the distribution of federal funds. In addition, DOL

provides much of the funding for research and development of state and local LMI products.

Other federal agencies have a less direct role in the production of LMI, but, nevertheless, produce information which can be vital to the program planner. The Census, conducted by the U.S. Department of Commerce, is an invaluable snapshot of the nation's employment patterns and trends. The Department of Commerce is also responsible for conducting the Current Population Survey (CPS) and for maintaining some of the industry and occupation classification systems in use today.

The role of another federal organization, the National Occupational Information Coordinating Committee (NOICC), has grown steadily since its inception in 1976. The NOICC is comprised of representatives from the U.S. Departments of Labor, Education, Defense, Agriculture and Commerce. This committee was established to coordinate the development of an occupational information system, although its interests now include promoting the improvement of LMI outside the occupational information area.

At the state level, working cooperatively with the Department of Labor, the Employment Security Agency conducts a state LMI program. The Audit and Analysis Department of the Iowa Department of Job Service operates the DOL program for Iowa. Audit and Analysis has research economists who gather data, publish and disseminate labor market information for the State and its labor market areas. These analysts can be a valuable source of information and technical assistance for local program planners. Occasionally, additional information or special studies are available for individual labor market areas. For information on how to contact the labor market analysts, see Appendix D.

The Iowa State Occupational Information Coordinating Committee (ISOICC), was established to coordinate the development and implementation of a state

occupational information system or network. Since 1978, the ISOICC has been working with its constituent agencies to develop an occupational information network (OIN) to provide the users (administrators, planners, service staff and others) easy-to-use resources to better plan and meet the needs of vocational education and employment and training programs. Through the OIN, statewide and area reports (16 Job Training Partnership Act Service Delivery Areas and 15 Area School Merged Areas) on occupational supply and demand, several special products for JTPA and vocational education, and various publications including a directory of resources and a users needs assessment survey and report have been produced.

Another resource available to the planner is the Division of Economic Analysis, Office for Planning and Programming. This Division is responsible for research on the condition of the Iowa economy. In cooperation with several state agencies, the Economic Analysis Division has developed for Iowa such economic analysis tools as a set of economic indicators, short and long-term projections of industrial employment tied to the state econometric model and other research materials on different aspects of Iowa's economy. The Iowa SOICC and its constituent agencies are working with the Economic Analysis Division to produce occupational projects from the short and long-term industrial employment projections for designated substate areas for use by planners.

At the local level, the development of LMI is more fragmented. Information is often produced by organizations, such as city planning departments, chambers of commerce, or local education agencies, for in-house use and is not made known to other interested parties. Education and employment and training organizations should attempt to seek out and take advantage of such sources.

Formally or informally, each school or training institution considers some labor market factors in making program choices. Some organizations contract with schools or consulting firms for labor market analysis. Others hire an

in-house labor market analyst to gather and develop information as needed for program operations. Still others rely upon the intuition of administrative and instructional staff to make program decisions. Using this Guide will not supplant these practices, but will help refine the planning process and assure that pertinent information has been considered.

The responsibility placed upon the local program planner is to be aware of all information available and how it can be used. This helps assure that the maximum effort has been made to match programs with labor market needs and avoid duplication of effort in securing needed information, as well as duplication of program offerings.

If possible, each institution should designated one individual to be the labor market information resource person for program operations. By centralizing this role in one individual, the institution will be facilitating the systematic use of LMI in program operations. This person may be the administrator, planner, or staff analyst whose responsibilities could include:

- identifying sources of existing LMI,
- compiling and assessing existing information,
- establishing information-sharing networks,
- setting priorities for developing local LMI, and
- promoting the awareness and use of LMI among staff.

It should be stressed that cooperation is the secret to effective development and use of labor market information. As resources shrink at all levels of government, it is unreasonable to expect any single agency to produce all of the information needed for program planning. Cooperative efforts among local and state agencies and their staff will maximize the effective use of available resources.

What Is Labor Market Information?

Before proceeding, it is necessary to discuss what is meant by labor market information within the context of this Guide. Simply put, it is information about the operation of the market for labor - where labor skills are exchanged for wages. This exchange usually occurs in a specific geographic location, referred to as the labor market area, which can vary in size, but is generally defined as that area in which workers normally seek and find employment and where employers normally recruit and hire workers. Labor market information describes this interaction and the conditions under which it occurs.

More specifically, labor market information describes and interprets the functioning of a labor market. The key elements which constitute that labor market are its labor resources (workers and trainees) and employment opportunities (jobs). Labor market information, therefore, is general information and aggregate statistics about jobs, either filled or vacant, and workers, either employed or not employed. LMI is distinguished from "job search information" and "placement information". Hence, it does not tell a job seeker how to search for work; nor does it contain information on individual job seekers, individual firms, or specific job openings.

There are three major components of LMI - economic, or labor force information (the number of people employed and unemployed); occupational information (descriptions of occupations); and demographic information (characteristics of the general population related to employment and workers). It can be qualitative (analytical and interpretive) as well as quantitative (statistical) with respect to labor supply, labor demand and career exploration.

LMI may be tied to a specific geographical area or, in the case of certain occupations, may describe sources of labor supply and demand which are statewide

or nationwide and not contained within a well-defined labor market area. Generally, a labor market area is an area wherein workers may change jobs without changing residence. The U.S. Department of Labor is responsible for identifying official labor market areas based on commuting patterns developed through the decennial census. In Iowa these designated areas are defined along county boundaries. Large counties or economically integrated groups of counties are referred to as Standard Metropolitan Statistical Areas (SMSA's). Several LMI publications in Iowa can be obtained for counties and SMSA's. The National Occupational Information Coordinating Committee has encouraged the use of these designated areas in planning education and training programs. These defined labor market areas provide a good starting point for the planner. In the majority of cases, these areas represent the most reasonable area for program graduates to seek work. However, it may not be reasonable to include all of a labor market area in planning for a particular program--or to limit the scope of program analysis to that area. Planners may need to begin with the designated area in their analysis and broaden, or narrow, the analysis based on the particular characteristics of the program being considered. In reality, labor markets are seldom coterminous with geopolitical boundaries such as school districts or cities. Therefore, the planner may at times need to take existing labor market information and where necessary adapt it to a more appropriate geographic area.

As part of the assessment of labor market potential for an occupational training program, the planner will need to determine what the labor market area is for occupational program graduates. This area may vary for different programs, but basically it is the geographical area within which it is reasonable for graduates to seek work. Obviously, this area will be limited by the normal commuting patterns and by the economic benefits offered to individuals in that occupation. For example, it is entirely possible that a gunsmith would have a

national labor market and have to be willing to move long distances to find employment. However, it may be unreasonable to expect a graduate from a clerical program to commute an hour for entry level wages. (One caution: many training institutions are preparing people for "entry level" jobs which presumably have career ladder opportunities. It may be advantageous for a graduate to consider jobs which at first are marginal in terms of the community-wage trade-off, with the hope that job promotions and subsequent wage increases would be forthcoming, thus making the initial sacrifice worthwhile.) The planner will want to decide upon a reasonable labor market area for each program under consideration, whether it be just the JTPA Service Delivery Area or Area School Merged Area or other multi-county areas, and use it in determining which information to include in the analysis.

How The Guide Was Developed

In order to present information on how to develop and use LMI in program planning, it was necessary to isolate the components of the planning process for which LMI is useful or essential. In reality, the process is seldom so rigid as that depicted in the schematic (page 10A), but the steps displayed are important in relating occupational programs to labor market needs. The intent is not to prescribe a specific sequence of steps for occupational program planners, but to provide a logical context within which LMI can be discussed in this Guide and applied to the planning process.

The schematic depicts the program operation cycle as occurring in four phases. Those phases include:

- PROGRAM ASSESSMENT/EVALUATION
- RESOURCE ASSESSMENT

. AUTHORIZATION

. IMPLEMENTATION/TERMINATION

LMI plays an integral role only in the first phase, which includes the assessment of potential programs and the evaluation of ongoing programs. Therefore, this Guide will discuss the development and use of LMI within this phase only. Methods will be presented which describe how LMI can be incorporated into the four major activities within the PROGRAM ASSESSMENT/EVALUATION phase - list creation, list refinement, labor market assessment, and program design. The purpose of the Guide is to illustrate how to create a comprehensive list of occupations that could possibly be related to an initial program idea; pare that list down to significant component skills by successively weeding out occupations which are not appropriate to the institution's training objectives; assess the labor market potential of the remaining occupations; and ultimately develop or evaluate programs based on occupations having similar characteristics or skills and employment opportunities. The resulting benefits to planners are: 1) easier use of available information for labor market analysis, 2) an opportunity to determine the full placement potential for program completers, and 3) a greater assurance that programs offered conform to both labor market needs and community interests.

As mentioned earlier, this Guide was first developed by the California SOICC and has been modified to reflect the situation in Iowa. The California information was gathered by interviewing a sample of occupational training providers to determine how they use labor market analysis in their planning process. Various types of training sites were selected, including community colleges, regional occupational programs, adult high schools, community-based organizations, and cooperative planning groups. Each site participating in the interview process was asked to describe the types and sources of LMI used in

program planning, as well as how the information was analyzed. The interviews provided input for the guidelines presented in this Guide.

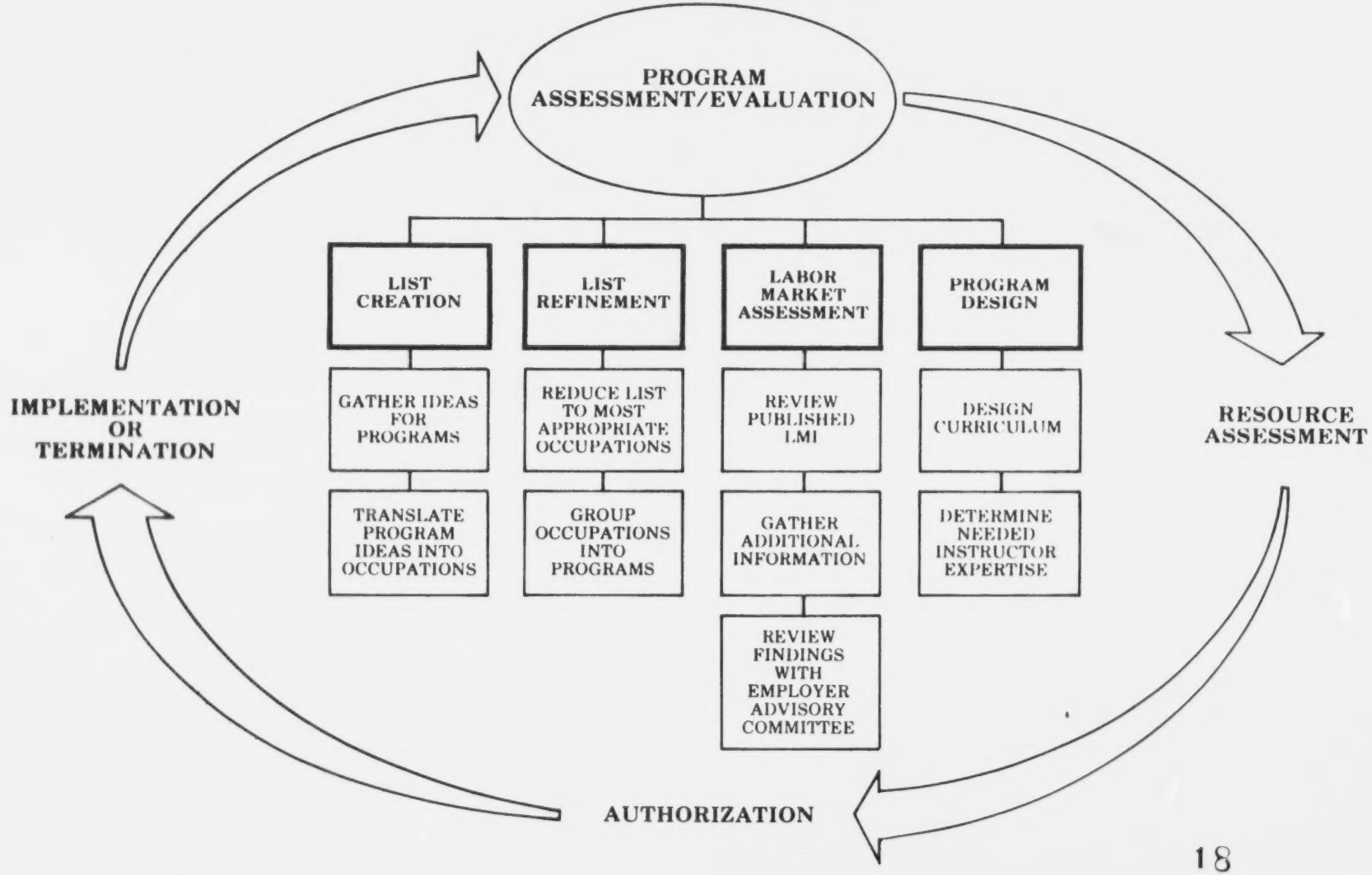
Both the Iowa and California Guides begin with a brief checklist of the steps involved in developing and using LMI in program planning. The checklist can be used by planners to keep track of their progress as they assess the labor market potential of an occupational training program. The checklist also serves as a "road map" for the remaining sections of the Guide, which include more detailed descriptions of the process. Appendices provide information about resources available to the planner and how to obtain them, along with definitions of terms and acronymns used in the Guide. Recognizing that numerous publications and resources are available, references in the Guide have been limited to those resources judged to be most useful. Many of the recommended publications are updated frequently; the planner should be cautious to use only the most current information.

A Note to Planners. It is important to keep in mind that it is not possible to perfectly forecast future labor market needs. Industrial and commercial applications of rapidly advancing technologies, along with changing consumer preferences, are only two of many factors which are difficult to predict, but which can affect the labor market. This Guide cannot eliminate all of the difficulties; it can only suggest methods for accessing and using that information which should be the foundation for making sound program decisions. It contains no magic formula - but using the Guide will help you locate and organize the information you will need for program assessment.

The processes described in this Guide will be easier to understand if you work through the steps using the recommended resources. We suggest that you read the Guide through once to get a sense of how and why the process works. Then the second time through, use the publications referenced in the Guide to follow a program suggestion through the entire process. Remember to call upon the resource organizations identified in Appendix D if you have any questions.

If you cannot do every step recommended in this Guide, DO NOT give up! Perform the steps you can and become familiar with the suggested resources. You will benefit from identifying and using resources you have not used in the past. As with any new skill, you will not be expert at first. By proceeding in this manner you will begin to acquire expertise in developing and using labor market information in the planning process.

THE USE OF LABOR MARKET INFORMATION IN THE PROGRAM OPERATION CYCLE



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CHAPTER ONE - CHECKLIST

How To Develop and Use Labor Market Information In Local Occupational Program Planning

ACTIVITY: LIST CREATION - Creating a Comprehensive List of Occupations From Program Ideas

STEPS	RESOURCES	RESULTS
1. Assess community interests and needs.	. Labor Market Information for Affirmative Action Programs . Suggestions, inquiries and ideas from community faculty, employers, etc. . _____	A "planning list" of program ideas based on community interest/needs.
2. Review industry/occupational trends. - at the national level	. Time/Newsweek . Business Week/Forbes/Fortune . Vocational Education Newsletters . Monthly Labor Review . U.S. Industrial Overlook . Employment and Earnings . Occupational Outlook Handbook . Occupational Outlook Quarterly . _____ . _____	A "planning list" of program ideas based on: . An awareness of national economic and technological development.

ACTIVITY: LIST CREATION - Creating a Comprehensive List of Occupations From Program Ideas (cont'd.)

STEPS	RESOURCES	RESULTS
- at the state level	. Labor Market Information for Iowa . Iowa Employment Review . Labor Force Summary . IDC DIGEST . Iowa Occupational Information Network reports (Statewide) . Iowa Labor Supply/Demand Analysis (Statewide) . State of Iowa Detailed Employment Forecasts . _____	. An awareness of trends in Iowa.
- at the local level	. Newspapers . Labor Market Information for Service Delivery Areas (quarterly) . Labor Area Summary (newsletter) . Iowa Occupational Information Network reports (JTPA Service Delivery Areas & Area School Merged Areas) . Labor Force Summary . _____ . _____	. An awareness of local job opportunities and occupational growth.

ACTIVITY: LIST CREATION - Creating a Comprehensive List of Occupations From Program Ideas (cont'd.)

STEPS	RESOURCES	RESULTS
3. Group together similar ideas/suggestions.		An organized list of ideas/ suggestions in manageable subject matter groups.
4. Choose appropriate classification system.	. Classification of Instructional Programs (CIP) . Guide for Occupational Exploration (GOE) . Standard Occupational Classification (SOC) . Census Occupational Classification System . Occupational Employment Statistics (OES) . _____ . _____	A classification system through which the grouped idea/suggestions can be translated to Dictionary of Occupational Title (DOT) occupations.
5. Link groups of similar ideas/suggestions to all related categories within chosen classification system.		A comprehensive list of all pertinent classification categories.
6. Identify DOT occupations related to the categories within the chosen classification system.	. GOE . SOC . National Crosswalk Service Center Report . _____	A comprehensive list of all DOT occupations pertinent to the classification categories.

CHECKLIST - How To Develop and Use Labor Market Information in Local Occupational Program Training

ACTIVITY: LIST REFINEMENT - Refining the List to the Most Appropriate Occupations

STEPS	RESOURCES	RESULTS
1. Cut list down based on employment size.	. Occupational Employment Statistics reports . Iowa Occupational Information Network reports . _____ . _____	A list of pertinent occupations with significant employment in Iowa.
2. Cut list by eliminating those occupations inappropriate to the institution's training objectives.	. Iowa Occupational Information Network reports . Vocational Preparation and Occupation (VPO) . National Crosswalk Service Center reports . DOT characteristics . _____	Further refined list - fewer occupations to analyze!

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ACTIVITY: LIST REFINEMENT - Refining the List to the Most Appropriate Occupations (cont'd.)

STEPS	RESOURCES	RESULTS
3. Analyze the essential skills, knowledge and aptitudes needed for each occupation to determine similarities for program grouping and eliminate inappropriate occupations.	. DOT definitions and characteristics . Vocational Preparation and Occupation (VPO) . National Crosswalk Service Center reports . Occupational Outlook Handbook . Specific Vocational Preparation (SVP) . Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles . Occupational Data Analysis System (ODAS) . _____ . _____	A final refined list group into programs ready for labor market analysis.

CHECKLIST - How To Develop and Use Labor Market Information in Local Occupational Program Training

ACTIVITY: LABOR MARKET ASSESSMENT - Assessing the Labor Market Potential of Selected Program Groupings

STEPS	RESOURCES	RESULTS
1. Review job outlook information in publications organized by the DOT classification system.	. Occupational Outlook Handbook . Iowa Labor Supply/Demand Analysis . Iowa Occupational Information Network reports . Labor Market Information for Service Delivery Areas . _____	Information relevant to the labor market opportunities for the subject occupations.
2. Review employment projections for Iowa and local area.	. Iowa Occupational Information Network reports . _____ . _____ . _____	An indication of local occupational trends and comparison of state and local industry/occupation patterns.
3. Check job openings.	. Local Job Service of Iowa office . Private employment agencies . Classified ads . _____ . _____	An indication of immediate local demand for occupations.

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ACTIVITY: LABOR MARKET ASSESSMENT - Assessing the Labor Market Potential of Selected Program Groupings (cont'd.)

STEPS	RESOURCES	RESULTS
4. Check placement rate and completions information from similar local programs for evaluation of existing programs, use information on your own completers at this step.	. Follow-up records of other training . Iowa Occupational Information Network reports . _____ . _____	Placement statistics offer an effective proxy measure of supply/demand conditions. Completions indicate the volume of trainees entering the labor market.
5. Survey employers*		
- Identify industries which employ subject	. Occupational Outlook Handbook . Conversion Table, DOT Industry Descriptions Standard Industrial Classifications . OES industry reports . Audit & Analysis Labor Market Analyst . _____	A list of industries for each program grouping of occupations.
- Identify local employers within the industries employing the subject occupations.	. Staff contacts with employers . Employer Directories . Directory of Iowa Manufacturers . Job Services of Iowa local offices . _____	A list of local companies which potentially employ the subject occupations.

* Employer surveys can be costly and time consuming and may not yield the needed information if not done properly.

ACTIVITY: LABOR MARKET ASSESSMENT - Assessing the Labor Market Potential of Selected Program Groupings (cont'd.)

STEPS	RESOURCES	RESULTS
- Conduct survey.	. _____ . _____ . _____	
6. Establish an employer advisory board.		
- Identify industries which employ subject occupations.	. Occupational Outlook Handbook . Conversion Table, DOT Industry Descriptions - Standard Industrial Classifications . OES industry reports . _____	A list of industries for each program grouping of occupations.
7. Review findings with Employer Advisory Committee.*		
- Establish the committee	. List of local companies developed in Step 5 or 6. . CISI Occupation Review groups . _____	Representative group of employers to serve on the advisory committee.

* [illegible] already have the [illegible] in place.

ACTIVITY: PROGRAM DESIGN - Designing the Program Content

STEPS	RESOURCES	RESULTS
1. Develop curriculum	. Descriptive information gathered during the analysis process from: - DOT - GOE - VPO - Occupational Outlook Handbook - Employer Advisory Committee - Surveys . Task Analysis: - Handbook for Analyzing Jobs - Guide for Analyzing Jobs - Occupational Data Analysis System (ODAS) and V-tec	Program curriculum which meets the needs of the employer community.

CHAPTER TWO - LIST CREATION

SECTION ONE: Gathering Ideas for Potential Programs by Assessing the Needs and Interests in the Community

SECTION TWO: Gathering Ideas for Potential Programs by Reviewing Employment Trends

SECTION THREE: Translating the "Planning List" into Occupational Titles

SECTION ONE:

Gathering Ideas for Potential Programs by Assessing the Needs and Interests in the Community

The first portion of the "planning list" can be developed by assessing the needs and interests of members of the community. An assessment of local interests and needs may provide a very valuable tool in aligning an organization/institution with the community's priorities. Assessment can be made through formal surveys and/or keeping track of informal suggestions or requests. Programs which address the community's interests and/or needs will generate program support in terms of steady enrollment, job placement after completion, assistance in curriculum development from employers, and contributions of equipment and community classroom facilities. In addition, a systematic assessment assures a more equitable provision of services. This avoids a situation in which local community members are served disproportionately.

The decision to conduct a formal survey of the general public, student population, or employer community will depend on several factors, not the least of which are cost and available resources.

If a needs assessment is to be conducted, it may be helpful to know the composition and the economics of the community. Such demographic information is available in three publications produced by Audit and Analysis, Iowa Department of Job Service.

- Labor Market Information for Affirmative Action Programs is published for the state as a whole, each SMSA, and the 99 counties in Iowa. Census data from 1980 are displayed for the population grouped by race, sex, age, ethnic group, and occupation group. Labor force status by sex, minority and occupation of Job Service of Iowa applicants are also included.

- Labor Market Information for Iowa - Job Training Partnership Act provides labor force data as well as demographic information for the state. Demographic data for the civilian population by age, race and

sex for 1980 and the projected fiscal year are provided. Labor market information in terms of Job Service of Iowa applicants and openings data, industry employment and characteristics of the insured unemployed are provided.

- Labor Market Information for Service Delivery Areas is published quarterly for each of the 16 JTPA Service Delivery Areas. Labor market information on Job Service of Iowa applicants and job openings are provided. Labor force and industry employment data for the area are also included.

  Additional demographic information can be obtained by calling the Audit and Analysis Department or by contacting the Iowa Census Data Center in the Office for Planning and Programming.

Since many new programs are initiated by suggestions or recommendations from faculty, students or employers, it is advisable for planners to develop a system to keep track of these ideas to assure that they are not inadvertently overlooked. Suggestion boxes in student lunch rooms, structured proposal forms for faculty or employer advisory committee members to use for submitting suggestions, and tally sheets for clerical staff to record telephone inquiries or suggestions are all relatively simple ways to systematically collect ideas for review.

SECTION TWO:

Gathering Ideas for Potential Programs by Reviewing Employment Trends

Ideas for the "planning list" can also be developed by keeping attuned to labor market developments. Concurrently with assessing community needs and keeping track of informal suggestions, planners should be reviewing employment trends at the national and state levels as well as at the local level. Emerging technologies may be recognized nationally before they affect occupations on a local level. This "advance warning" will help keep planners alert to the changing needs in the economy.

Resources abound which provide employment trend information on the national, state, and local levels. To identify high growth industries and high demand occupations, planners should review publications such as newspapers, news and business magazines, trade and professional journals, and government publications. Trend information may generate ideas for programs outside normal course offerings and the expertise of existing staff. Understanding trends make it easier for planners to interpret expressed community interests and keep programs on the forefront of labor market needs.

Reviewing the vast amount of written material relevant to labor market information is a time-consuming, but beneficial endeavor for the program planner. Knowing what information is available and how to get it is half the battle. The other half is developing expertise in using it.

While most of the publications cited in this Guide will be used by planners for reference purposes, five are recommended for thorough reading. These particular resources can provide the groundwork for understanding the dynamic nature of labor markets. Planners should set aside time to become familiar with the content and organization of the following publications:

The Occupation Employment Statistics (OES) reports on industry employment (manufacturing and hospitals; regulated industries, trade and local government; and construction, services, and finance, real estate and insurance industries) provide staffing patterns (the kinds of occupations and their proportion of the total employment) for specific industries. This information is based on the Occupational Employment Statistics survey of approximately 24,000 Iowa employers. In cases where the planner is aware of a firm moving into the labor market area, and determines what kind of business it is, the OES reports can provide an indication of the occupations likely to be needed.

An important source of ideas for the "planning list" are the statewide and 31 substate area (16 JTPA Service Delivery Areas and 15 Are School Merged Areas) Occupational Information Network reports developed and available from the Iowa State Occupational Information Coordinating Committee. The OIN is available on IBM compatible microcomputer and was developed in cooperation with the Iowa Department of Job Service, Department of Public Instruction and Office for Planning and Programming. The primary purpose in developing these reports was to establish an information network to bring together all of the available data on occupational demand and supply and the characteristics of occupations being prepared on a recurring basis by various government and education and training agencies at the local, state and federal levels. The reports were designed to provide data in a format that meets the specific user group needs and can be used easily. The data has been grouped into 165 clusters of occupations requiring less than a baccalaureate degree and 33 clusters of occupations requiring a baccalaureate degree or more.

The labor demand data for both the statewide and area reports are obtained from the Iowa Department of Job Service Occupational Employment Statistics

program taking into account fluctuations in the Iowa economy as forecast by the Iowa Detailed Employment Forecasts mentioned above.

One of the primary objectives for using the OIN, is to analyze labor supply and demand data to identify labor market balances and imbalances in specific occupational areas. Labor market balances occur when the demand for workers and the labor supply are equal or close to equal. Imbalances result where there is an increasing or unmet need for trained workers or a shortage of labor supply. Imbalances are also seen when too many people are competing for jobs that are relatively scarce or are decreasing in number. Identifying these imbalances have some important implications for the planner. A shortage may indicate the need to start new programs or expand existing programs. But on the other hand, a surplus might indicate a need to cut back or eliminate certain programs.

The initial analysis of the relationship between labor demand and labor supply data may lead to the above conclusions. However, once the planner has identified possible imbalances, it is important to examine the probable causes of a shortage or surplus and what the implications are to training programs currently in place or to determine whether new programs need to be developed. Factors which may be examined include turnover rates, wages, working conditions, local economic climate, training program completions, existence of training programs in other geographic areas and others.

How To Use the OIN Reports To Construct A "Planning List"

The statewide and area Occupational Information Network reports can be a useful source of ideas for the "planning list". Using each occupational cluster or groups of related clusters, it is possible to create four lists of occupations. These are: 1) Occupations ranked by the projected employment in an

EXAMPLE 1A.

06/28/85

IOWA OCCUPATIONAL INFORMATION NETWORK

SUPPLY-DEMAND REPORT

STATEWIDE

CLUSTER TITLE: ACCOUNTING & BOOKKEEPING

CLUSTER CODE 0370

- OCCUPATION/PROGRAM - TITLE	CODE	1984 EMPL	1986 EMPL	1995 EMPL	(ESTIMATED '85-'86) GROWTH	REPLAC	OPEN	PUBLIC SECOND	PUBLIC P. SEC	PRIVATE P. SEC	JTPA/ OJT	JOB CORPS	APPREN- TICE	TOTAL
DEMAND DATA:														
ACCOUNTANTS & AUDITORS	10240201	7951	8246	9172	86	292	378							
BOOKKEEPING/BILLING MAC	40040201	2518	2599	2801	13	91	104							
PROOF MACHINE OPERATORS	40040202	824	853	975	4	30	34							
ACCOUNTING CLERKS	40060601	7556	7841	8657	89	320	409							
BOOKKEEPERS, HAND	40060603	12152	12430	13680	5	513	518							
CHECKING CLERKS	40062209	212	222	255	3	7	10							
PAYROLL/TIMEKEEPING CLE	40064000	1896	1986	2259	20	62	82							
ACTUARIAL CLERKS	40065204	34	40	48	5	1	6							
RATERS	40065209	720	764	921	24	27	51							
STATISTICAL CLERKS	40065211	1126	1229	1373	13	44	57							
COIN MACH OPS/CURRENCY	40066803	41	43	49	0	2	2							
STATEMENT CLERKS	40066823	491	511	585	3	21	24							
SORTING CLERKS, BANK	40066844	118	123	140	1	5	6							
TOTALS		35639	36887	40915	266	1415	1681							
SUPPLY:														
ACCOUNTING	06.0200C								2					2
ACCOUNTING, GENERAL	06.0201							1		55	2			58
ACCOUNTING, BOOKKEEPING, A	07.0101							69						69
ACCOUNTING AND COMPUTING	07.0102							1	225	49	11			286
BOOKKEEPING	07.0103							32	208		16	1		257
MACHINE BILLING, BOOKKEEPI	07.0104							7		2	5			14
ACCOUNTING, BOOKKEEPING, A	07.0199									10				10
TOTALS								110	435	116	34	1		696

EXAMPLE 1B.

06/28/85

IOWA OCCUPATIONAL INFORMATION NETWORK

SUPPLY-DEMAND REPORT

AREA 11

CLUSTER TITLE: ACCOUNTING & BOOKKEEPING

CLUSTER CODE 0370

- OCCUPATION/PROGRAM - TITLE	CODE	1984 EMPL	1986 EMPL	1995 EMPL	(ESTIMATED '85-'86) GROWTH	REPLAC	OPEN	PUBLIC SECOND	PUBLIC P. SEC	PRIVATE P. SEC	JTPA/ OJT	JOB CORPS	APPREN- TICE	TOTAL
DEMAND DATA:														
ACCOUNTANTS & AUDITORS	10240201	2516	2617	2963	42	92	134							
BOOKKEEPING/BILLING MAC	40040201	480	499	529	6	17	23							
PROOF MACHINE OPERATORS	40040202	177	183	209	1	6	7							
ACCOUNTING CLERKS	40060601	2371	2488	2793	47	101	148							
BOOKKEEPERS, HAND	40060603	2514	2599	2862	6	107	113							
CHECKING CLERKS	40062209	81	85	99	1	3	4							
PAYROLL/TIMEKEEPING CLE	40064000	511	532	606	2	17	19							
ACTUARIAL CLERKS	40065204	24	28	33	3	1	4							
RATERS	40065209	448	478	574	18	17	35							
STATISTICAL CLERKS	40065211	558	703	797	12	25	37							
COIN MACH OPS/CURRENCY	40066803	8	8	10	0	0	0							
STATEMENT CLERKS	40066823	112	117	134	1	5	6							
SORTING CLERKS, BANK	40066844	37	39	44	0	2	2							
TOTALS		9837	10376	11653	139	393	532							
SUPPLY:														
ACCOUNTING, GENERAL	06.0201							1		24				25
ACCOUNTING AND COMPUTING	07.0102								45	18				63
BOOKKEEPING	07.0103							4	33		1			38
MACHINE BILLING, BOOKKEEPI	07.0104										2			2
TOTALS								5	78	42	3			128

occupation; 2) Occupations ranked by the percent change in employment; 3) Occupations ranked by the composite scores of the first two rankings; and 4) Occupations ranked by the ratio of supply to demand. By working through this process the planners will be developing a growth profile of local occupational demand. These same lists may be developed for the statewide data for either state planning or to compare with local needs. When these four lists are analyzed together, specific occupations may surface as having many job opportunities, rapid growth and be in a "shortage" situation (demand for workers but a low supply of trained workers). These occupations need to be examined further and should be added to the "planning list". The following steps are outlined to help the planner focus on and organize data using the OIN.

LIST EMPLOYMENT OPPORTUNITIES

Using the Demand-Supply table in the OIN report for the state and area or areas you are interested in (See Example 1A and 1B), make a list of occupations in descending order according to the projected employment levels for the planning year you have targeted (See Example 2).

LIST PERCENT CHANGE

Using the same area report table, make a list of occupations in descending order according to the size of Percent Change in employment for the target year (See Example 3).

RANK AND COMBINE FIRST TWO LISTS

Assign a score to each occupation in each list according to rank. Locate each occupation on both lists; add together the rank score for each occupation. Create a new list, ranked by the combined score for each occupation (See Example 4). The lowest combined score should be first; the highest combined score last.

Example 2

List of Occupations Based on Employment Levels
Projected for 1986

Statewide and SDA 11

Title	Projected Employment Level	Rank
Statewide		
Accounting and Bookkeeping		
Bookkeepers, Hand	12,430	1
Accountants and Auditors	8,246	2
Accounting Clerks	7,841	3
Bookkeeping/Billing Machine Operators	2,599	4
Payroll/Timekeeping Clerk	1,986	5
Statistical Clerks	1,229	6
Proof Machine Operators	853	7
Raters	764	8
Statement Clerks	511	9
Checking Clerks	222	10
Sorting Clerks	173	11
Coin Machine Operators/Currency	43	12
Actuarial Clerks	40	13
Service Delivery Area 11		
Accounting and Bookkeeping		
Accountants and Auditors	2,617	1
Bookkeepers, Hand	2,599	2
Accounting Clerks	2,488	3
Statistical Clerks	703	4
Payroll/Timekeeping Clerk	532	5
Bookkeeping/Billing Machine Operators	499	6
Raters	403	7
Proof Machine Operators	183	8
Statement Clerks	117	9
Checking Clerks	85	10
Sorting Clerks, Bank	39	11
Actuarial Clerks	28	12
Coin Machine Operators/Currency	8	13

Example 3

List of Occupations Based on Percent Change
Ranked in Descending Order

Statewide and SDA 11
1984-1986

Title	Percent Change	Rank
Statewide		
Accounting and Bookkeeping		
Actuarial Clerks	17.65	1
Statistical Clerks	9.15	2
Raters	6.11	3
Coin Machine Operators/Currency	4.88	4
Payroll/Timekeeping Clerk	4.75	5
Checking Clerks	4.72	6
Sorting Clerks, Bank	4.24	7
Statement Clerks	4.07	8
Accounting Clerks	3.77	9
Accountants and Auditors	3.71	10
Proof Machine Operators	3.52	11
Bookkeeping/Billing Machine Operators	3.22	12
Bookkeeping, Hand	2.29	13
Service Delivery Area 11		
Accounting and Bookkeeping		
Statistical Clerks	25.99	1
Actuarial Clerks	16.67	2
Raters	6.70	3
Sorting Clerks, Bank	5.41	5
Accounting Clerks	4.94	6
Checking Clerks	4.94	6
Statement Clerks	4.46	7
Payroll/Timekeeping Clerks	4.11	8
Accountants and Auditors	4.01	9
Bookkeeping/Billing Machine Operators	3.96	10
Proof Machine Operators	3.39	11
Bookkeepers, Hand	3.38	12
Coin Machine Operators/Currency	0	13

Example 4

List of Occupations by Composite Score
Ranked in Secondary Order

Statewide and SDA 11

Title	Score	Rank
Statewide		
Accounting and Bookkeeping		
Statistical Clerks	8	1
Payroll/Timekeeping Clerks	10	2
Accountants and Auditors	11	3
Raters	11	3
Accounting Clerks	12	4
Bookkeeping, Hand	14	5
Actuarial Clerks	14	5
Bookkeeping/Billing Machine Operators	16	6
Checking Clerks	16	6
Coin Machine Operators/Currency	16	6
Statement Clerks	17	7
Proof Machine Operators	18	8
Sorting Clerks, Bank	18	8
Service Delivery Area 11		
Accounting and Bookkeeping		
Statistical Clerks	5	1
Accounting Clerks	9	2
Accountants and Auditors	10	3
Raters	10	3
Payroll/Timekeeping Clerks	13	4
Actuarial Clerks	14	5
Bookkeepers, Hand	14	5
Sorting Clerks, Bank	16	6
Checking Clerks	16	6
Statement Clerks	16	6
Bookkeeping/Billing Machine Operators	16	6
Proof Machine Operators	19	7
Coin Machine Operators/Currency	25	8

COMPUTE A DEMAND TO SUPPLY RATIO

Using the same cluster(s) demand and supply table(s), make a list of occupations in descending order according to the size of the ratio of supply to demand. The ratio is obtained by dividing the supply for an occupation by the demand.

The smaller the ratio of the supply to demand the greater the need for trained workers to meet the demand. Conversely the larger the ratio, the less demand and greater the surplus of trained workers competing for few openings.

The planner needs to prepare the table "LIST OF OCCUPATIONS IN DEMAND" (See Example 5). This table may be prepared after making an initial determination of occupations for which there is a demand or after you have developed your lists as in Example 2, 3, and 4. Enter the occupational titles that are being considered. Using the cluster demand and supply tables from the Occupational Information Network, enter the labor demand for the occupation or occupations that relate to the title. Then, enter the labor supply from the educational and training program or programs that relate to the occupation or occupations listed.

Equating occupational titles to specific educational and training programs may be difficult. In some instances, programs train for more than one occupation. The occupation that the training program completer enters may be dependent on the number of competencies achieved by the time he or she left the program. For example, in the "Accounting and Computing" program, a completer may be qualified as a bookkeeper or accountant, demanding on the amount of time in the program.

The next step is to compute a Ratio of Supply to Demand. The ratio is obtained by dividing the supply for an occupation by the demand for that occupation (See Example 6). A ratio less that "1" indicates a labor shortage. The

smaller the number, the greater the need for skilled workers. A ratio greater than "1" indicates a probably surplus of skilled workers to job opportunities. If the ratio approximates "1", then a balance exists.

Since the labor demand and supply data available for this analysis are not complete, other factors may be considered in meeting planning needs. One indication is the ration of E.S. applicants to openings from the OIN Analysis Information (Example 7A and 7B) or the "Supply/Demand Ratios" from the Labor Market Information for Service Delivery Areas from the Iowa Department of Job Service. For this data, the smaller the ratio, the more likely that the occupation is in demand. The Job Service data is compiled by dividing the applicants (supply) by job openings (demand) like the previous ratio.

A comments section is provided to include other information that was used in the determination of occupations in demand. For example, openings at a specific employer, because of a new plant location or expansion, may constitute a demand for an occupation that may not be reflected in the data.

This form, or a similar one, should be completed to document why you have chosen particular occupations for training. This type of documentation would serve as a record for accountability if such should be requested.

Example 5

List of Occupations in Demand for SDA _____ or Statewide

Occupational Title	1 Demand	2 Supply	3 Supply/ Demand	4 Job Service Applicants/Openings	5 Comments

1. Total Demand for the occupation.

2. Number of individuals completing training programs (all individuals not just those from specific institution or employment and training program).

3. Ratio by demand to supply. Divide column 2 by column 1. The smaller the number the greater the need for trained workers for a particular occupation; the larger the number the less need for skilled workers. CAUTION: Other factors may need to be considered e.g. wage rates, turnover, plant closing.

4. Ratio of the number of Job Service applicants to the number of openings received.

5. Comments concerning why a particular occupation is on the list, complementary information and source of information.

Example 6

List of Occupations in Demand for Iowa and SDA 11

Occupational Title	1 Demand	2 Supply	3 Supply/ Demand	4 Job Service Applicants/Openings	5 Comments
Iowa					
Bookkeepers, Hand	518	696	1.34	4.39	J.S. ratio for Bookkeeper I is 4.41; for Bookkeeper II is 4.39. Make sure training is for the appropriate skill level. Bookkeeper, Hand ranks 5th on combined ranking table.
SDA 11					
Bookkeepers, Hand	113	128	1.13	4.59	J.S. ratio for Bookkeeper I is 4.86; for Bookkeeper II is 4.59. Bookkeepers, Hand ranks 5th on combined ranking table.

1. Total Demand for the occupation.

2. Number of individuals completing training programs (all individuals not just those from specific institution or employment and training program).

3. Ratio by demand to supply. Divide column 2 by column 1. The smaller the number the greater the need for trained workers for a particular occupation; the larger the number the less need for skilled workers. CAUTION: Other factors may need to be considered e.g. wage rates, turnover, plant closing.

4. Ratio of the number of Job Service applicants to the number of openings received.

5. Comments concerning why a particular occupation is on the list, complementary information and source of information.

EXAMPLE 7A.

06/28/85

IOWA OCCUPATIONAL INFORMATION NETWORK

ANALYSIS INFORMATION

STATEWIDE — IOWA DEPT. OF JOB SERVICE

CLUSTER TITLE: ACCOUNTING & BOOKKEEPING — CLUSTER CODE 0370

CODE	TITLE	TOTAL E.S. APPLICANTS	TOTAL E.S. OPENINGS	RATIO E.S. APPS/OPEN	AVG. HRWAGE
160.162-010	ACCOUNTANT, TAX	11	6	1.83	5.73
160.162-014	AUDITOR	32	23	1.39	6.74
160.167-010	ACCOUNTANT	801	128	6.26	7.08
160.167-014	ACCOUNTANT, BUDGET	9	2	4.50	8.40
160.167-018	ACCOUNTANT, COST	62	17	3.65	7.63
160.167-034	AUDITOR, INTERNAL	4	1	4.00	6.73
160.167-038	AUDITOR, TAX	14	6	2.33	4.92
210.362-010	DISTRIBUTION-ACCOUNTING C	16	3	5.33	4.08
210.382-010	AUDIT CLERK	195	33	5.91	4.17
210.382-014	BOOKKEEPER 1	2665	483	5.52	4.41
210.382-018	BOOKKEEPER 2	449	116	3.87	4.39
210.382-022	BOOKKEEPING-MACHINE OPERA	6	4	1.50	4.88
210.382-026	BOOKKEEPING-MACHINE OPERA	44	10	4.40	4.93
210.382-054	NIGHT AUDITOR	11	23	0.48	3.71
210.382-058	RECONCILEMENT CLERK	3	2	1.50	5.00
214.362-026	INVOICE-CONTROL CLERK	5	2	2.50	4.43
214.382-014	BILLING TYPIST	42	38	1.11	4.44
214.482-010	BILLING-MACHINE OPERATOR	34	11	3.09	4.37
214.482-022	RATER	30	7	4.29	4.92
215.367-022	TIMEKEEPER	15	8	1.88	4.87
215.482-010	PAYROLL CLERK	107	42	2.55	5.10
216.362-010	BOND CLERK	13	0	—	N.A.
216.382-010	ACCOUNTING CLERK, DATA PR	13	2	6.50	8.13
216.382-022	BUDGET CLERK	1	3	0.33	5.65
216.382-034	COST CLERK	4	0	—	N.A.
216.382-062	STATISTICAL CLERK	27	24	1.13	4.91
216.387-010	CHECK-PROCESSING CLERK 1	2	6	0.33	4.33
216.482-010	ACCOUNTING CLERK	1640	426	3.85	4.53
216.587-014	POSTING CLERK	12	0	—	N.A.
217.382-010	PROOF-MACHINE OPERATOR	55	43	1.28	3.76
219.362-022	CLERK, TELEGRAPH SERVICE	4	0	—	N.A.
219.362-058	STATEMENT CLERK	0	3	0.00	4.08
219.487-010	TAX CLERK 1	4	0	—	N.A.
245.362-010	MEDICAL-RECORD CLERK	26	18	1.44	4.81

EXAMPLE 7B.

06/28/85

IOWA OCCUPATIONAL INFORMATION NETWORK

ANALYSIS INFORMATION

AREA 11 — IOWA DEPT. OF JOB SERVICE

CLUSTER TITLE: ACCOUNTING & BOOKKEEPING — CLUSTER CODE 0370

CODE	TITLE	TOTAL E.S. APPLICANTS	TOTAL E.S. OPENINGS	RATIO E.S. APPS/OPEN	AVG. HRWAGE
160.162-014	AUDITOR	12	7	1.71	6.55
160.167-010	ACCOUNTANT	220	28	7.86	6.27
160.167-014	ACCOUNTANT, BUDGET	9	2	4.50	8.40
160.167-018	ACCOUNTANT, COST	11	4	2.75	7.29
160.167-034	AUDITOR, INTERNAL	4	1	4.00	6.73
160.167-038	AUDITOR, TAX	5	1	5.00	9.18
210.362-010	DISTRIBUTION-ACCOUNTING C	6	0	--	N.A.
210.382-010	AUDIT CLERK	45	6	7.50	4.60
210.382-014	BOOKKEEPER 1	321	79	4.06	4.86
210.382-018	BOOKKEEPER 2	112	43	2.60	4.59
210.382-026	BOOKKEEPING-MACHINE OPERA	8	2	4.00	4.35
210.382-054	NIGHT AUDITOR	11	19	0.58	3.74
210.382-058	RECONCILEMENT CLERK	3	2	1.50	5.00
214.382-014	BILLING TYPIST	12	8	1.50	5.20
214.482-010	BILLING-MACHINE OPERATOR	8	4	2.00	4.35
214.482-022	RATER	9	4	2.25	5.24
215.367-022	TIMEKEEPER	3	6	0.50	5.24
215.482-010	PAYROLL CLERK	16	12	1.33	4.94
216.362-010	BOND CLERK	13	0	--	N.A.
216.382-010	ACCOUNTING CLERK, DATA PR	6	0	--	N.A.
216.382-062	STATISTICAL CLERK	8	6	1.33	5.48
216.387-010	CHECK-PROCESSING CLERK 1	2	6	0.33	4.33
216.482-010	ACCOUNTING CLERK	478	173	2.76	4.61
216.587-014	POSTING CLERK	7	0	--	N.A.
217.382-010	PROOF-MACHINE OPERATOR	19	14	1.36	3.83
219.362-058	STATEMENT CLERK	0	3	0.00	4.08
219.487-010	TAX CLERK 1	4	0	--	N.A.
245.362-010	MEDICAL-RECORD CLERK	7	14	0.50	4.98

SECTION THREE:

Translating the "Planning List" Into Occupational Titles

This section describes how to convert the "planning list" into occupational titles to assure consistency and comprehensiveness when gathering information.

After identifying interest and needs in the community and projected occupational trends, planners will have a number of new program ideas to explore, as well as existing programs to evaluate. This "planning list", therefore will be made up of three types of ideas: 1) occupational categories from the OIN, 2) existing programs to be evaluated, and, 3) program ideas, based on an assessment of community interests, and a general review of employment trends. This latter group is not uniformly classified and can be at various levels of detail. For example, planners may receive suggestions which are categorical descriptions, such as computer technology or machine trades; functional titles, such as word processing or medical transcribing; or specific job titles, such as legal secretary, dental assistant, or chef. It should be noted, at this point, that planners should strive to solicit suggestions with as much occupational specificity as possible. While the following processes can be carried out even with broad suggestions, the effort is greatly facilitated by well-defined program concepts.

In order to proceed with the next step of the analysis, planners must accomplish two things. First, they must break down the "planning list" into a comparable level of occupational definition. This is done for you by the OIN clusters. However, if you do not use this as your basic list, you need to translate your other ideas to the OIN clusters. Second, you must establish which occupations (or more specifically, which skills knowledge, and aptitudes)

will define the potential program. The benefits to planners are a common understanding of the occupational focus of the programs being considered and easier use of available labor market information.

The following process provides a method for grouping "planning list" ideas, organizing them into an existing classification system and expanding the "planning list" to all possible related occupations. This assures that the planner will consider the demand for groups of related occupations, rather than only one occupation at a time. This is important because while the demand for the occupation might not warrant starting or continuing a program, the combined demand for several related occupations could indicate a viable program. Later, this list will be reduced to occupations most appropriate for a potential program based on occupational characteristics and employment opportunities. One method would be to translate the "planning list" into standardized occupational titles and definitions. The Dictionary of Occupational Titles (DOT) is the most comprehensive detailed occupational classification system. This means the DOT-specific occupations can serve as the building blocks for effective program development. This "lowest-common-denominator" approach allows planners to identify the homogeneous characteristics of diverse occupations. DOT titles and codes will also provide a means to access essential information during the labor market analysis process.

The challenge to the planner at this point, then, is to translate the "planning list" into DOT titles and codes. Many methods and tools are available to accomplish this. The means chosen will depend upon the planners' familiarity with available classification systems and the specificity of the initial "planning list". The following steps provide guidelines for the translation of program ideas to specific occupational titles.

GROUP SIMILAR IDEAS/SUGGESTIONS

Loosely organize the "planning list" into like subject matter groups where possible. By identifying the groups for later analysis, the planner will be able to segment the work into manageable units and will have already begun the process of grouping occupations into programs. The basic format for this grouping has been done through the creation of the labor demand "list" obtained from the OIN as outlined in Section Two. The OIN clusters are based on the grouping of occupations and programs into related groups or clusters. The planner now needs to add the occupations/program ideas obtained from the community and existing programs to the groups. The Example 8 illustrates a hypothetical "planning list" grouped, where possible, by subject matter.

CHOOSE CLASSIFICATION SYSTEM

In order to obtain lists of DOT occupations from the subject matter groups, choose a classification system which has been directly or indirectly related to the DOT. These include:

- Guide for Occupational Exploration (GOE)
- Standard Occupational Classification Manual (SOC)
- Census Occupational Classification System
- Classification of Instructional Programs (CIP)
- Occupational Employment Statistics (OES) Classification System

LINK GROUPS TO RELATED CATEGORIES

Taking one subject matter group at a time, link "planning list" ideas to all possible relevant categories in the classification system chosen. Carefully review all of the categories, as related areas are not always evident.

To illustrate this step, the CLERICAL grouping from Example 7 has been chosen. This group which includes the idea "Bookkeepers, Accounting Clerks" is

Example 8

"Planning List" Grouped By Subject Matter

Program Ideas	Source of Ideas
CLERICAL	
Word Processing	Employer Advisory Committee Member
Medical Transcribing	Faculty Member
Legal Secretary	Community Assessment Questionnaire
Secretaries, Other	OIN Cluster List
Bookkeepers, Accounting Clerks	OIN Cluster List
Secretaries, Legal	OIN Cluster List
FOOD PRODUCTION	
Chef	School Board Member
Cooks, Except Private	OIN Cluster List
MISCELLANEOUS	
Computer Technology	Student Suggestion
Machine Trades	Employer Advisory Committee Member
Dental Assistant	Community Assessment Questionnaire
Sales Workers, NEC*	OIN Cluster List
Guards	OIN Cluster List

* Not elsewhere classified.

Example 9

Classification of Instructional Programs

Categories Related to "Bookkeepers, Accounting Clerks"

07. Business and Office

07.0101	Accounting, Bookkeeping, and Related Programs, General
07.0102	Accounting and Computing
07.0103	Bookkeeping
07.0104	Machine Billing, Bookkeeping and Computing
07.0199	Accounting, Bookkeeping, and Related Programs, Other

related to the categories within the Classification of Instructional Programs (CIP) shown in Example 9.

NOTE: The CIP was chosen for illustration purposes only; any classification system could have been used in similar fashion.

IDENTIFY DOT OCCUPATIONS

Once pertinent categories have been identified, translate these categories to specific DOT occupations. This can be accomplished directly (some classification systems are actually groupings of DOT occupations, e.g., GOE, SOC) or indirectly (some classification systems have been related to the DOT by means of a cross-reference system or "crosswalk", e.g., CIP, USOE, OES, Census).

NOTE: Special reports are available through the National Crosswalk Service Center to assist in this cross classification process. Planners may identify DOT occupations by using the reports as described in the next section, REDUCING THE "PLANNING LIST" TO THE MOST APPROPRIATE OCCUPATIONS.

The planner will notice that the process described above can result in very long lists of occupations to consider. The more specific the original suggestions were, the less of a problem this will be. In any case, the result will be a reasonably comprehensive listing of DOT occupations which may be related to the initial program ideas. The steps which follow will refine the "planning list" to the occupations most appropriate to the training institution.

CHAPTER THREE - LIST REFINEMENT

SECTION ONE: Reducing the "Planning List" to the Most Appropriate Occupations

SECTION TWO: Grouping Occupations into Programs by Evaluating Skills, Knowledge and Aptitudes Related to Each Occupation

CHAPTER THREE - LIST REFINEMENT

The first section of this chapter describes methods which refine the "planning list" to those occupations which warrant labor market assessment. The second section discusses grouping occupations into potential programs based on similarity of skills, knowledge, and aptitudes required for the occupations.

SECTION ONE:

Reducing the "Planning List" to the Most Appropriate Occupations

The next activity in the analytical process is to reduce the "planning list" to a manageable size and refine the list to those occupations which are appropriate for the individual training institution. The following criteria can be used to eliminate occupations: employment size, training time, and math and language skills requirements. Each criterion can be used to reduce the amount of detailed labor market assessment. The following steps describe how to use the criteria available to reduce the number of occupations on your "planning list" and verify the appropriateness of the occupations to the institution's training guidelines.

REDUCE LIST BY EMPLOYMENT SIZE

Look up the categories identified in the LINK GROUPS TO RELATED CATEGORIES step (page 45) in the Occupational Information Network (OIN). Identify those occupations which have significant projected employment levels in your area and statewide. Determine these levels by assessment of the local area in comparison to the state total for that occupation. You also need to examine these occupations in terms of the demand either through replacement needs or projected expansion needs. This process is used to limit the over 12,000 occupations defined in the DOT to those most commonly employed in Iowa and, therefore, most

likely to be relevant to vocational education and employment and training providers.

REDUCE LIST BY OCCUPATIONAL CHARACTERISTICS

Using the appropriate resource, assess the characteristics of the occupations in light of your training objectives. The Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles and reports of the National Crosswalk Service Center list the extent of mathematical and language development and specific vocational preparation (SVP) necessary to perform the duties of each occupation. The juxtaposition of this information to the reduced DOT listing will allow you to refine the list of potential occupations further by eliminating those occupations requiring either:

- greater mathematical or language skills than their potential student population normally possesses, or
- more time in specific vocational preparation than allowed by the training institution's guidelines.

SECTION TWO:

Grouping Occupations into Programs by Evaluating Skills, Knowledge, and Aptitudes Related to Each Occupation

The final step in the refinement process is to break the remaining occupations down to essential skills, knowledge, and aptitudes. This process will provide information to a program grouping and to the training institution. The resources available to aid in this process include the occupational definitions and characteristics described in the Dictionary of Occupational Titles, Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles, Career Guides, Exploring Careers, the Occupational Outlook Handbook, special reports of the National Crosswalk Service Center and in ODAS. These seven resources provide information regarding:

- worker actions, nature of work performed;
- machines, tools, equipment or materials used;
- products made, subject to matter dealt with, or services rendered;
- working conditions;
- earning potential;
- training or licensure required;
- interests, aptitudes, temperments required.

Planners can recognize similarities between occupations, as well as eliminate inappropriate occupations on the basis of this information. Once extraneous occupations are eliminated, the remaining occupations can be clustered into preliminary program groupings, if the OIN clusters are not used.

What remains at this point are groups of occupations which are specifically defined, closely related to each other, and appropriate to the institution's objectives. Now the planner can begin to effectively evaluate the labor market opportunities for these groups.

Much of this has been done for the planner in the OIN reports. However, the planner may wish to reassess the cluster information and assign additional occupations to the OIN clusters if the data warrants such decisions.

CHAPTER FOUR - LABOR MARKET ASSESSMENT

SECTION ONE: Reviewing Published Labor Market Information

SECTION TWO: Gathering Additional Information

SECTION THREE: Review Findings With Employer Advisory Committee

CHAPTER FOUR - LABOR MARKET ASSESSMENT

This chapter describes the resources and methods necessary to assess the labor market potential of occupational groupings developed to bridge the gap between training an individual for employment and the realities of the labor market.

SECTION ONE:

Reviewing Published Labor Market Information

Numerical analysis of supply and demand has long been problematic; hindered by the multiplicity of classification systems used, the geographical coverage of existing data, the time periods for which data have been available and the inability to accurately measure the elements involved. The methods that have been designed at the national level are adequate for that level; the components of the supply/demand equation can be reasonably estimated and statistical aberations tend to balance out. At the local level, smaller numbers adversely affect statistical reliability and data for many supply/demand elements cannot be obtained. In order to compensate for inaccurate or missing data at the local level, this Guide will present a methodology which does not depend on a strict numerical comparison of supply data to demand data. It is, however, an effective means of exploring labor market opportunities for graduates of those programs being considered.

The process described below can apply effectively to both the assessment of new program possibilities and the evaluation of existing program offerings. It assesses indications of growth trends in demand from a variety of sources; such as labor market publications, placement success of similar programs, job openings, the labor market analyst and local employer input. This process will help provide more information to allow program administrators to make more informed decisions.

In preparing to begin the analysis, it may be helpful for the planner to develop a file on each group of occupations and to analyze one group at a time to facilitate the process. The information from these files will provide the basis of presentations to the Employer Advisory Committee. Throughout the analysis process, the planner should maintain an objective perspective on the information by continuously comparing local trends with state and national trends. At this point the planner will also need to determine the appropriate labor market area for future program graduates in order to decide which local information to include in the assessment. The planner should start with information for the officially defined labor market area and modify it as necessary.

CHECK DOT-BASED LMI

Check for job outlook information in available publications which provide DOT-based information, such as, the Occupational Outlook Handbook. At the state/local level, the OIN, labor supply and demand reports, newsletters or the LMI reports for JTPA can be used.

CHECK PROJECTIONS OF EMPLOYMENT REPORT

Locate the related occupational categories in the area and statewide OIN. While the related category in these reports will, more than likely, be composed of more than one DOT occupation, the date on employment growth and opportunities can be used as indicators of future occupational trends.

SECTION TWO:

Gathering Additional Information

CHECK JOB OPENINGS

Contact a sample of local Job Service of Iowa and private job placement offices and review classified ads in newspapers to ascertain the number and frequency of job openings in the pertinent occupations.

CHECK SIMILAR PROGRAMS OFFERED LOCALLY

The statewide and area OIN reports contain data on the number of program completers for public and private institutions statewide, and in the area reports, for the institutions in Iowa or a particular service area. You may wish to contact training institutions to discuss placement success and specific skill levels acquired by completers. You can use the specific DOT descriptions to assure comparability of training when assessing the information gathered.

When evaluating an existing program, you can use information on the placement rate of your own program completers as an indication of the demand for the skills being taught as well as the quality of the program.

CHECK WITH LABOR MARKET ANALYST

Contact the Iowa Department of Job Service Audit and Analysis labor market analyst to verify information already collected and to solicit additional information or technical assistance. See Appendix D for information on how to contact the labor market analysts.

SURVEY EMPLOYERS

Survey employers within the labor market to confirm the existence of job opportunities and to verify the precise skills, knowledge and aptitudes required. Very often new skills required by emerging technologies can be identified by contacting employers. However, employer surveys are expensive, require staff time and resources which may not be readily available.

If you undertake this step, you should coordinate with other institutions and organizations, such as Audit and Analysis of the Iowa Department of Job Service, to avoid duplication as well as to lessen the impact on the employer community. The extent of the survey will depend on the amount of information that was available from other sources. Most of the time, the survey will consist of spot-checking with a few employers to confirm information obtained earlier.

SECTION THREE:

Review Findings With Employer Advisory Committee

In order to assure that the labor market analysis process has been thorough and that reasonable conclusions have been reached, an occupational-specific Employer Advisory Committee should be established. The Committee should not only review the information developed during the analysis, but also recommend which skills should be emphasized in program design and make suggestions on how to achieve success in placing graduates. (These committees may already exist by curriculum area for the merged area schools.)

The work that was done during the labor market analysis step will allow planners to begin soliciting members for the Committee if one is not in existence. An advisory committee should be a group of individuals willing to make a commitment to the institution or organization by regularly attending advisory meetings and being available for specific assistance when needed. If possible, they should represent the range of industries which employ the relevant occupations.

Information should be presented to the Committee in a concise yet complete manner. This will allow meetings to be structured to obtain precisely the feedback necessary in a short time, which is crucial to the productive use of the meeting time. Specific information which the planner will want reviewed includes:

- DOT descriptions for occupations to be related to the program,
- skills, knowledge and aptitudes necessary for the jobs; and
- indications of labor market opportunities.

As in the employer survey, the planner should carefully note differences between information gathered earlier and that provided by the Employer Advisory

Committee. Those differences should be discussed by the Committee and, if possible, resolved at this point.

NOTE: The planner should also take into consideration other factors related to the particular occupations/programs under consideration. These include such factors as licensing and certification requirements, wage information (local area and state), frequency of turnover, etc. These factors may provide additional information that explains the reasons for a surplus, shortage or balanced situation in the labor exchange process for particular occupations.

CHAPTER FIVE - PROGRAM DESIGN

CHAPTER FIVE - PROGRAM DESIGN

The design of a new program, as well as the modification of ongoing programs, can benefit from the information gathered during the analysis process. The labor market information of particular interest to the planner is that which encompasses employer requirements for the skills, knowledge and aptitudes (SKA) required of entry-level workers. Many sources of LMI are available for relating the SKA to job content. The descriptive material provided by publications such as the DOT, Occupational Outlook Handbook, Guide for Occupational Exploration, special reports from the National Crosswalk Service Center and many others can provide the framework for curriculum development and discussions with employers. The information may also be used in determining course content, facilities needed, state-of-the-art requirements, and expertise needed by the instructor. Since job content is dynamic, published descriptions may become outdated. Consequently, employer input gathered by surveys or participation on Employer Advisory Committee is vital.

In the situation where published descriptions differ significantly from the information gathered from surveys or Employer Advisory Committees, the planner may need to perform a task analysis before designing programs. This analysis requires detailed observation of workers performing the job or detailed discussion with someone familiar with the job, the methods and equipment used, the materials or services produced, and the traits required. The specific tasks associated with a given job or group of jobs can clarify a specific program design in terms of the course content. In other words, are the specific tasks complex enough to justify multiple courses, or can the program be limited to one course? These questions are judgmental and the program may, in fact, vary from one school to another.

Detailed task analysis instructions are available in the following publications: Handbook for Analyzing Jobs and Guide for Analyzing Jobs. Another resource available through the Iowa Curriculum Assistance Service is the Occupation Data Analysis System (ODAS). ODAS was developed to provide information on occupations for development of competencies-based curriculum.

APPENDICES

A - Glossary

B - Bibliography

C - How To Obtain Publications

D - Resource Organizations

GLOSSARY OF TERMS AND ACRONYMS

GLOSSARY OF TERMS AND ACRONYMS

-A-

A & A - Audit and Analysis, a unit of the Iowa Department of Job Service (see page 3).

Aptitude - The potential for acquiring vocational proficiency after appropriate training and experience.

-B-

BLS - See Bureau of Labor Statistics.

Bureau of Labor Statistics - A federal agency, administered by the United States Department of Labor, responsible for gathering, analyzing, and publishing labor force data.

-C-

CBO - See Community-Based Organizations.

Census Occupational Classification System - A Standard Occupational Classification based occupational coding structure developed by the Bureau of the Census for the 1980 census. The System groups occupations into about 600 occupational categories.

CIP - See Classification of Instructional Programs.

Classification of Instructional Programs - A classification system developed by the U.S. Department of Education and published in 1981. It "is intended to replace the HEGIS Taxonomy and fill a void in Handbook VI with regards to instructional programs."

Community-Based Organization - A private, nonprofit organization which is representative of a community or a significant segment of a community, and which provides employment and training services.

Community Classroom - A site or a series of physical locations away from a school site in which occupational training programs are conducted.

Community College - A two-year post-secondary institution offering occupational programs, Associate Degree programs, and lower division classes.

Community Profile - Demographic characteristics of the population of a community such as: age and sex distribution, income and educational level, ethnic background, poverty status, geographic concentration, student enrollment, registered voters, and labor force status.

Crosswalk - A cross-reference system which links programs or occupations within one classification system with programs or occupations within one or more other systems.

Current Population Survey - Monthly household survey of a sample of the civilian noninstitutional population of the United States. The survey provides monthly statistics on employment, unemployment, and related subjects which are analyzed and published by the Bureau of Labor Statistics.

Curriculum - An organized group of courses required for graduation or the attainment of any other predetermined goal in a major field of study.

Demand - See Labor Demand.

Demographic Information - This information describes the population within a specified geographic area in terms of number, age, ethnic composition, sex, work status, income, and/or other pertinent characteristics.

Dictionary of Occupational Titles - A classification system which identifies jobs by the nature of the work performed and the demands of such work activities on the worker.

DOE - Unites States Department of Education.

DOL - United States Department of Labor.

DOT - See Dictionary of Occupational Titles.

-E-

EAC - Employer Advisory Committee.

Economic Indicators - Measurements of fluctuations in basic factors of a community, such as employment, unemployment, hours worked, income, savings, volume of building permits, volume of sales, used to determine overall economic trends.

Emerging Occupations - These new occupations are created by the development and commercialization of new technologies (e.g., computer-controlled word processing equipment has created a new clerical occupation, Word Processor).

Employment Training - Instruction or other learning experience designed to impart skills, knowledge, or abilities to prepare individuals for suitable employment. Usually the training is short-term with the objective to immediate employment.

Entry-Level Occupation - A job requiring little or not previous work experience, or relatively minimum training or education. Occupations which require a greater amount of education or training have specific entry-level classifications such as "apprentice" or "intern".

ETA - Employment and Training Administration within the United States Department of Labor.

-F-

Follow-up Information - Information regarding the status of program participants after completing/leaving the program used primarily for program evaluation.

-G-

GOE - See Guide for Occupational Exploration.

Guide for Occupational Exploration - A publication of the USDOL which groups DOT occupations by interests and by ability and traits required for successful performance.

-H-

Handbook VI - See "Standard Terminology for Curriculum and Instruction in Local and State School Systems".

-I-

Industry - Firms which have been grouped together according to similar economic activity (see Standard Industrial Classification Manual).

Industry/Occupation Matrix - A cross-tabulation of data showing employment by both occupation and industry. The matrix forms a grid which can be used either vertically or horizontally and displays the distribution of occupations within industry categories. It may also be used as a base for calculating occupational projections within industry.

I/O - See Industry/Occupation Matrix.

IDJS - See Iowa Department of Job Service.

Iowa Department of Job Service - The state agency responsible for paying unemployment insurance, collecting employment related taxes from employers; providing placement and other assistance to job seekers; and collecting, compiling and publishing labor market and labor force information.

ISOICC - See Iowa State Occupational Information Coordinating Committee.

Iowa State Occupational Information Coordinating Committee - A state-level interagency committee established to promote the development of a state occupational information network. The ISOICC is composed of representatives from the Iowa Department of Job Service, Area Schools and Career Education Branch and Rehabilitation Education and Services Branch of the Iowa Department of Public Instruction, the State Job Training Coordinating Council, and the Iowa Development Commission.

-J-

Job - A group of positions which are identical with respect to their major or significant tasks and sufficiently alike to justify their being covered by a single analysis. There may be one of many persons employed in the same job (as distinguished from "position" and "occupation").

Job Analysis - The process of determining, by observation, interview, and study, the pertinent information relating to a specific job, including such factors as qualifications for employment, relation to other jobs, capability and adjustability of the worker, equipment and material used, education, training, and physical demands and environmental conditions data.

Job Opportunities - Job openings or vacancies for which a hire is expected to occur during a given time period. As used in the OIN reports, these openings or vacancies result from the creation of new jobs or from replacement needs (i.e., due to retirement, disablement, death, or extended withdrawal from the labor force). Not included in the OIN reports are job openings created when a worker leaves a job, but remains in the labor force (e.g., promotion, change of occupation or employer, and/or termination).

Job Search Information - Guidance for a job seeker on how to conduct a job search (e.g., interview techniques, resume writing, personal grooming suggestions, and application completion guidelines).

Job Training Partnership Act - A federal jobs program emphasizing local control and the involvement of the private sector in the training and employment of target populations.

JTPA - See Job Training Partnership Act.

-L-

LD - See Language Development.

Labor Demand - The number of job opportunities expected to occur in a given period of time because of change in employment levels and the need to replace workers who die, retire, emigrate, enter the military, or otherwise leave the local labor force.

Labor Force - Includes all persons 16 years of age and older who are employed plus those unemployed but available for and seeking work.

Labor Force Status - The condition or situation of an individual with respect to participation in the labor force (e.g., working or seeking work).

Labor Market Analysis - The measurement and evaluation of economic forces as they relate to the employment process in the local labor market area. It considers the many variables that affect labor demand-supply relationships, including such factors as population growth and characteristics, industrial structure and development, technological developments, shifts in consumer demands, volume and extent of unionization and trade disputes, recruitment practices, wage levels, conditions of employment, and training opportunities.

Labor Market Area - See page 7 for a description.

Labor Market Information - See page 6 for a description.

Labor Supply - The number of persons either working, or unemployed and actively seeking work, or who would actively seek work if they believed jobs to be available, may refer to the current situation or to expectations for the future.

Language Development - A characteristic related to DOT occupations which indicates the level of language skill required of a worker to perform the duties of a particular occupation. Specifically, it is a measure of acquired language skills, not necessarily vocationally oriented, such as mastery of an

extensive vocabulary; use of correct sentence structure, punctuation, and spelling; or an appreciation of literature. (Also see Mathematical Development and Specific Vocational Preparation.) (Refer to Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles for a complete definition.)

LMA - Labor Market Area (See page 7 for a description).

LMI - Labor Market Information (See page 6 for a description).

-M-

MD - See Mathematical Development.

Mathematical Development - A characteristic related to DOT occupations which indicates the level of computational skill required of a worker to perform the duties of a particular occupation. Specifically, it is a measure of acquired mathematical skills, not necessarily vocationally oriented, such as the ability to solve arithmetic, algebraic and geometric problems ranging from fairly elemental to dealing with abstractions. (Also see Language Development and Specific Vocational Preparation.) (Refer to Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles for a complete definition.)

-N-

NOICC - National Occupational Information Coordinating Committee (See page 3 for a description).

-O-

Occupation - A collective description of a number of individual jobs performed, with minor variations, in many establishments (as distinguished from "job" and "position").

Occupational Classification System - An identification and classification of jobs according to similar significant factors involved in the job or group of jobs.

Occupational Education - Any educational program with an occupational objective. A broad generic term describing vocational education at the post-secondary level, but not limited to any particular delivery system.

Occupational Employment Statistics - Data derived from a survey of employers within industries regarding their occupational composition. The survey was designed by BLS and conducted by the State LMI organizations.

OES - See Occupational Employment Statistics.

Occupational Information System/Network - A comprehensive information system/network including data on current and projected occupational demand, estimates of labor supply by occupation, and data concerning the nature of work, working conditions, promotional opportunities and entrance requirements.

OIS/OIN - See Occupational Information System/Network.

Occupational Structure - The aggregation of staffing patterns across industries within a labor market. (See Staffing Pattern.)

-P-

Placement Information - Information used in job placement activities regarding the skills, knowledge, and abilities possessed by individual job seekers and/or required by an individual employer for a specific job (as distinguished from "follow-up information").

Placement Rate - The ratio of participants placed in training-related employment to the number of participants seeking employment; usually separately measured for each program.

Position - A collection of tasks constituting the total work assignment of a single worker (as distinguished from "job" and "occupation").

Program - Planned sequence of courses, services, or activities designed to meet an occupational objective.

Projections - Estimates of future levels of labor force, employment, job openings, labor supply, and other information using specific methodologies and based on known data and assumptions about future economic conditions and the impact of technological advances.

-S-

SDA - Service Delivery Area as designated under JTPA. See Job Training Partnership Act.

SIC - See Standard Industrial Classification Manual.

Skills (job) - Competencies imparted to or possessed by persons to prepare or make them acceptable for employment (paid or unpaid) in a specific occupation or a cluster of closely related occupations in an occupational field.

SMSA - Standard Metropolitan Statistical Area (See page 7 for further description).

SOC - See Standard Occupational Classification Manual.

Specific Vocational Preparation (SVP) - A characteristic related to DOT occupations which indicates the amount of time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job-worker situation. The training may be acquired in a school, work, military, institutional, or a vocational environment. It does not include orientation training required of even fully qualified workers to become accustomed to the special conditions of any new job. (Also see "Language Development" and "Mathematical Development") (Refer to Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles for a complete definition.)

Staffing Pattern - The distribution of employment by occupation within an industry or firm. It is the combination of occupations unique to an industry which is required to produce the goods or services of that industry.

Standard Industrial Classification Manual (SIC) - A systematic grouping of related industrial activities on the basis of certain definite criteria such as the nature of raw materials used, process of manufacture, use of the products, type of operation, type of service performed, or principal product produced, mined, or distributed.

Standard Occupational Classification Manual (SOC) - A classification system developed by the Department of Commerce for cross-referencing and aggregating occupation-related data collected by social and economic statistical reporting programs. The SOC groups DOT occupations by work performed.

Standard Terminology for Curriculum Instruction in Local and State School Systems - A handbook which provides a classification system for curriculum and instruction for educational institutions in both general and occupational programs. Also referred to as Handbook VI and United States Office of Education Code (USOE). Replaced by the Classification of Instructional Programs (CIP).

Supply - See Labor Supply.

SVP - See Specific Vocational Preparation.

-U-

United States Office of Education Code - See "Standard Terminology for Curriculum and Instruction in Local and State School Systems".

USUOE - See United States Office of Education Code.

-V-

VEA - Vocational Education Act.

Vocational Education - A planned and systematic sequence of instruction at the secondary and post-secondary levels, designed to impart predetermined skills, knowledge, or abilities with respect to designated occupational objectives.

APPENDIX B

Bibliography

BIBLIOGRAPHY

The following list includes publications used as references in developing the guide, A Guide for Local Occupational Program Planning. The publications which are generally available and useful to local planners are referenced to Appendix C which shows where to order them.

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APPENDIX C

How To Obtain Publications

HOW TO OBTAIN PUBLICATIONS

REFERENCE NUMBER	PUBLICATION SOURCE
1	Audit and Analysis Iowa Department of Job Service 1000 East Grand Des Moines, Iowa 50319
2	Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402 (Include Stock Number, Catalog Number, or Identification Number where available)
3	Area Schools and Career Education Branch Department of Public Instruction Grimes State Office Building Des Moines, Iowa 50319
4	The National Center for Research in Vocational Education National Center Publications, Box F 1960 Kenny Road Columbus, Ohio 43210
5	California Occupational Information Coordinating Committee 800 Capitol Mall, MIC-67 Sacramento, California 95814
6	National Occupational Information Coordinating Committee 2100 M Street, N.W. Suite 156 Washington, D.C. 20037
7	Iowa State Occupational Information Coordinating Committee 523 East 12th Street Des Moines, Iowa 50319
8	Iowa Development Commission 600 East Court Avenue, Suite A Des Moines, Iowa 50319
9	Materials Development Center Stout Vocational Rehabilitation Institute University of Wisconsin - Stout Menomonie, Wisconsin 54751

APPENDIX D

Resource Organizations

RESOURCE ORGANIZATIONS

Iowa Department of Job Service
Audit and Analysis
Labor Market Information Unit
1000 East Grand Avenue
Des Moines, Iowa 50319
515/281-3439

Iowa Department of Public Instruction
Area Schools and Career Education Branch
Grimes State Office Building
Des Moines, Iowa 50319
515/281-3575

Iowa Office for Planning and Programming
Economic Analysis Division
523 East 12th Street
Des Moines, Iowa 50319
515/281-3005

Iowa Office for Planning and Programming
Iowa Census Data Center
523 East 12th Street
Des Moines, Iowa 50319
515/281-3738

Iowa State Occupational Information Coordinating Committee
523 East 12th Street
Des Moines, Iowa 50319
515/281-8075

National Crosswalk Service Center
Iowa State Occupational Information Coordinating Committee
523 East 12th Street
Des Moines, Iowa 50319
515/281-6356

U.S. Department of Education
National Center for Education Statistics
Statistical Information Office
400 Maryland Avenue SW
Washington, D.C. 20202
301/436-7900

U.S. Department of Labor, Region 7
911 Walnut Street
Kansas City, Missouri 64106
Bureau of Labor Statistics
816/374-2481

Employment and Training Administration, Room 1000
816/374-3796

AUDIT AND ANALYSIS
LABOR MARKET INFORMATION
PRODUCT DESCRIPTIONS

LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT INFORMATION

Contains	Labor force, unemployment and employment data by labor area; Industry employment by labor area
Available	Monthly for State, SMSA's and counties
Contact	Ann Wagner 515/281-8182

LABOR MARKET INFORMATION FOR SERVICE DELIVERY AREAS

Contains	Characteristics of Job Service applicants; Openings and applicants by occupation; Job openings by industry; Nonagricultural wage and salary employment; Labor force and unemployment; Characteristics of the insured unemployed
Available	Quarterly for the 16 Service Delivery Areas
Contact	Mike Blank 515/281-8179

LABOR MARKET INFORMATION FOR IOWA

Contains	Demographic, labor force, and occupational data for Iowa
Available	Annual for State
Contact	Mike Blank 515/281-8179

WAGE SURVEYS

Contains	Wage information by occupation--averages, ranges and frequency distributions
Available	Annually for State; as requested by local users for substate areas
Contact	Jim Gillaspey 515/281-8179

LABOR MARKET INFORMATION FOR AFFIRMATIVE ACTION PROGRAMS

Contains — Population by sex and minority (1980);
Employment status by sex and minority status for previous calendar year;
Occupational attachment of the labor force by race, sex and EEO category (1980);
Occupation of Job Service applicants

Available — Annual for State, SMSA's, counties and selected cities

Contact — Jone Culp 515/281-8183

OCCUPATIONAL EMPLOYMENT STATISTICS (OES)

Contains — Detailed data on industry staffing patterns;
Data is obtained from a mail survey of a sample of employers that is conducted in a three-year cycle:
1st year - Regulated industries, wholesale and retail trade, state and local government
2nd year - Manufacturing and hospitals
3rd year - Mining, construction, finance, banking and insurance, services

Available — Annually for State
(Three consecutive annual publications needed for a complete series)

Contact — Scott Ahlgreen 515/281-5197

OCCUPATIONAL OUTLOOK TO 1986

Contains — Occupational projections to 1986 for the nonagricultural wage and salary component of employment

Available — Annually for State and the 16 Service Delivery Areas

Contact — Ann Wagner 515/281-8182

IOWA LABOR SUPPLY/DEMAND ANALYSIS

Contains — Job openings and applicants by occupations;
Job openings by industry;
Characteristics of the insured unemployed;
Appendix contains labor supply and demand for selected local offices

Available — Quarterly for State

Contact — Mike Blank 515/281-8179

CAREER GUIDES

Contains	General information for specific jobs within an occupational cluster--a brief job description, entry requirements, employment outlook, and hours and working conditions.
Available	Computer Centers Finance Insurance & Real Estate Careers Clerical Careers (to be completed by December 1984)
Contact	Ann Wagner 515/281-8182

HOURS AND EARNINGS FOR PRODUCTION WORKERS

Contains	Average weekly earnings, average weekly hours and average hourly earnings for production workers in manufacturing.
Available	Monthly for State and SMSA's that contain the cities of Cedar Rapids, Davenport, Des Moines, Dubuque, Sioux City and Waterloo
Contact	Steve Deeds 515/281-3895

202 SUMMARY TABLES

Contains	Employment and wage data by industry (tabulated from Quarterly Employer's Payroll and Contribution Report)
Available	Quarterly for State and all Iowa counties
Contact	Bob Schutt 515/281-8178

JOB INSURANCE BENEFITS

Contains	Number of weeks compensated and amount of benefits paid under the state and federal unemployment insurance programs
Available	Monthly for State and all Iowa counties
Contact	Bob Schutt 515/281-8178